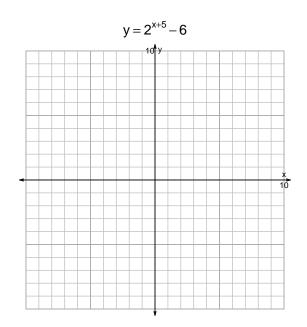
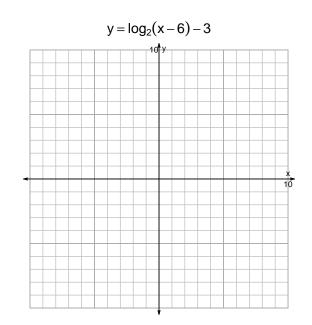
s18quiz: EXP LOG (QUIZ v241)

1. Graph  $y=2^{x+5}-6$  and  $y=\log_2(x-6)-3$  on the grids below. Also, draw any asymptotes with dotted lines.





2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$23 = \left(\frac{4}{5}\right) \cdot 10^{-7t/3}$$

3. An exponential function  $f(x) = 54.9 \cdot e^{-0.606x}$  is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(-0.4).

- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(300)$ .